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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,348	07/24/2000	Do-hyoung Kim	Q60039	4464

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EXAMINER

NGUYEN, CHAU T

ART UNIT PAPER NUMBER

2663

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DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/624,348

Applicant(s)

KIM, DO-HYOUNG

Examiner

Nhat Do

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-7 is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 01/23/04 have been fully considered but they are not persuasive.

Applicants argue that examiner used impermissible hindsight reasoning in concluding that a person of ordinary skill in the art would have used a source device to monitor a format of the output bit stream of the source device while communications are maintained between the source device and the sink device to determined if requirements for the system resources are changed because neither James nor the APA teach or suggest this aspect of the invention (Remarks page 2).

In reply, James discloses, in the prior system, the bridges are used to monitor the format of the output bit stream and request the IRMs for additional bandwidth (Col. 2, lines 41-45). This implementation causes latency and data lost (Col. 2, lines 46-52). To solve the problem, James uses the talker (the source) to monitor the change of bandwidth and request the IRMs for more bandwidth.

Although James fails to disclose explicitly the talker (the source) monitor the output bit stream, making the talker (the source) to monitor the output bit stream would have been obvious to a person having ordinary skill in the art because the talker (the source) of James performs the function of the bridge, which monitors the output bit stream in the prior system.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,539,450 to James et al in view of admitted prior art.

Regarding to claim 1, James et al disclose in an IEEE 1394 bus system performing:

A talker (source device) detects if the bandwidth (resource) requirements change (Col. 10, lines 41-55);

The talker (source device) allocates additional bandwidth (Col. 10, line 41-55; fig. 10.);

James et al fails to disclose the talker (source device) monitors the data format in allocating additional bandwidth. However, James discloses the prior system uses the bridge to monitor the data format in allocating additional bandwidth (Col. 2, lines 41-45). It would have been obvious to a person having ordinary skill in the art by the time the invention was made to make the talker (the source) to monitor the output bit stream because the talker (the source) of James performs the function of the bridge in prior system.

James et al also fail to disclose the talker releases the redundant system source. However, James et al disclose the talker must decrease the bandwidth (release the

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redundant system source) when data format changes (Col. 2, lines 41-45). It would have been obvious to a person having ordinary skill in the art by the time the invention was made to have the talker (the source) designed so that it decrease the bandwidth (release the redundant system source) when the new data format requires less bandwidth than the previous data format in order to conserve the resource of the system.

James et al disclose the talker broadcasts audio, video, or any other data format to different listeners (sink devices), and each listener has a controller to set up connection between the talker and listener (Col. 2, lines 26-33). However, James et al fail to disclose the listener (sink device) performs:

Allocating presently required bandwidth (resource) for communicating between the talker and the listener; detecting and releasing the bandwidth (final resource) when the communication is terminated.

However, the admitted prior art discloses in the IEEE 1394 standard system, the DTV (sink device) allocates presently required bandwidth (resource) for communication channel (Specification page 3, lines 15-20); and releasing the bandwidth (resource) when the communication is terminated (Specification page 4, lines 14-18).

It is inherent that there exists the step of retrieving (detecting) the bandwidth prior to releasing it.

Therefore, a skilled artisan in the art would have been motivated to apply these steps in James et al system in order to set up and disconnect a communication channel

between the talker and listener. The motivation is to make the system complies with other systems that imply IEEE 13 94 standard.

Consequently, it would have been obvious to a person of ordinary skill in the art by the time the invention was made to have the listener disclosed by James designed so that it allocates presently required bandwidth (resource) for communicating between the talker and the listener; and detects/releases the bandwidth (resource) when the communication between the talker and listener is terminated.

Regarding to claim 2, James et al disclose updating the oPCR at the talker regarding to the change of the bandwidth (Col. 10, lines 44, and 45). It is inherent that the detection of bandwidth change (final resource) is based on the updated data of the oPCR at the talker.

Regarding to claim 3, based on the admitted prior art, in IEEE 1394 system, connection management among devices is defined by IEC61883, it is inherent the oPCR disclosed by James et al is defined according to IEC61883 standard. For informing the listener the change of the required bandwidth, it is inherent that the payload of the oPCR has be updated.

Allowable Subject Matter

4. Claims 4-7 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhat Do whose telephone number is (703) 305-5743. The examiner can normally be reached on 9:00 AM - 6:00 PM (Monday-Friday).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nhat Do
Examiner
Art Unit 2663

ND

March 24, 2004.


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 3/29/04